

JON M. HUNTSMAN, JR. Governor

GARY HERBERT
Lieutenant Governor

# Department of Environmental Quality

Richard W. Sprott Executive Director

DIVISION OF AIR QUALITY Cheryl Heying Director

DAQE-IN0100020006-08

April 28, 2008

Dave Stout CEMEX 7150 Pollock Drive Las Vegas, Nevada 29119

Dear Mr. Stout:

Re: Intent to Approve: Modification to Approval Order DAQE-AN0002002-02 by Increasing

Production, Beaver County - CDS B; ATT; NSPS; MACT, Title V Minor

Project Code: N010002-0006

The attached document is the Intent to Approve for the above-referenced project. The Intent to Approve is subject to public review. Any comments received shall be considered before an Approval Order is issued.

Future correspondence on this Intent to Approve should include the engineer's name as well as the DAQE number as shown on the upper right-hand corner of this letter. Please direct any questions you may have on this project to Mr. Tim DeJulis. He may be reached at (801) 536-4012.

Sincerely,

John T. Blanchard, Manager Minor New Source Review Section

JTB:TDJ:kw

cc: Southwest Utah Public Health Department

Mike Owens, EPA Region VIII

# STATE OF UTAH

# **Department of Environmental Quality**

# **Division of Air Quality**

# INTENT TO APPROVE: Modification to Approval Order DAQE-AN0002002-02 by Increasing Production

Prepared By: Tim DeJulis, Engineer (801) 536-4012 Email: tdejulis@utah.gov

## INTENT TO APPROVE NUMBER

DAQE-IN0100020006-08

**Date: April 28, 2008** 

# **CEMEX**

Source Contact Dave Stout (703) 591-0789

M. Cheryl Heying Executive Secretary Utah Air Quality Board

#### Abstract

CEMEX, owner and operator of the construction materials and concrete plant in Beaver, Beaver County, intends to modify their Approval Order by increasing production. As part of this request new equipment items will be employed.

Beaver County is an attainment area of the National Ambient Air Quality Standards (NAAQS) for all pollutants. New Source Performance Standards (NSPS), Maximum Achievable Control Technology (MACT), regulations, and Title V of the 1990 Clean Air Act apply to this source (40 CFR 60 Subpart A, 000, and IIII; 40 CFR 63 Subpart A, and Subpart ZZZZ). National Emission Standards for Hazardous Air Pollutants (NESHAP) regulations do not apply to this source. This area source does not require a Title V operating permit.

The emissions, in tons per year, will change as follows:  $PM_{10}$  (+ 0.64),  $NO_x$  (+ 1.84),  $SO_2$  (+ 0.12), CO (+ 0.39), VOC (+ 0.14), HAPs (+ 0.04) The changes in emissions will result in the following, in tons per year, potential to emit totals:  $PM_{10} = 11.08$ ,  $NO_x = 18.12$ ,  $SO_2 = 1.20$ , CO = 3.90, VOC = 1.44, HAPs = 0.28

The Notice of Intent (NOI) for the above-referenced project has been evaluated and has been found to be consistent with the requirements of the Utah Administrative Code Rule 307 (UAC R307). Air pollution producing sources and/or their air control facilities may not be constructed, installed, established, or modified prior to the issuance of an Approval Order (AO) by the Executive Secretary of the Utah Air Quality Board.

A 30-day public comment period will be held in accordance with UAC R307-401-7. A notice of intent to approve will be published in the Beaver Press on May 1, 2008. During the public comment period the proposal and the evaluation of its impact on air quality will be available for both you and the public to review and comment. If anyone so requests a public hearing, it will be held in accordance with UAC R307-401-7. The hearing will be held as close as practicable to the location of the source. Any comments received during the public comment period and the hearing will be evaluated.

Please review the proposed AO conditions during this period and make any comments you may have. The proposed conditions of the AO may be changed as a result of the comments received. Unless changed, the AO will be based upon the following conditions:

### **General Conditions:**

1. This AO applies to the following company:

<u>Utah Office</u>	Corporate Office
CEMEX	CEMEX
2303 North Coral Canyon Road	7150 Pollock Drive
Washington, Utah 84780	Las Vegas, Nevada 84780
Phone Number (702) 591-0789	(702) 260-9900
Fax Number (435) 251-8729	(702) 260-9902

The equipment listed in this AO shall be operated at the following location:

2240 North 400 West, Beaver, Beaver County

Universal Transverse Mercator (UTM) Coordinate System: UTM Datum NAD 1927 4,240,822 meters Northing, 356,102 meters Easting, Zone 12

- 2. All definitions, terms, abbreviations, and references used in this AO conform to those used in the UAC R307 and Title 40 of the Code of Federal Regulations (40 CFR). Unless noted otherwise, references cited in these AO conditions refer to those rules.
- 3. The limits set forth in this AO shall not be exceeded without prior approval in accordance with R307-401.
- 4. Modifications to the equipment or processes approved by this AO that could affect the emissions covered by this AO must be reviewed and approved in accordance with R307-401.
- 5. All records referenced in this AO or in applicable NSPS and MACT regulations, which are required to be kept by the owner/operator, shall be made available to the Executive Secretary or Executive Secretary's representative upon request. All records shall be kept for a minimum five-year period.
- 6. CEMEX shall conduct its operations of the concrete and construction materials plant in accordance with the terms and conditions of this AO, which was written pursuant to CEMEX's Notice of Intent submitted to the Division of Air Quality (DAQ) on October 9, 2007 and additional information submitted to the DAQ on April 2, 2008.
- 7. This AO shall replace the AO (DAQE-AN0002002-02) dated September 27, 2002.
- 8. The approved installations shall consist of the following equipment or equivalent\*:

A. One (1) Jaw Crusher \*\*\*

Rated Capacity: 350 tons per hour

B. One (1) Screen

C. One (1) Wash plant \*\*

D. One (1) Concrete Batch Plant

Attached equipment: Various material storage silos with attached fabric

filter baghouses

E. Various conveyor belts

F. Two (2) Generation Engines \*\*\*\*

Fuel Type: Diesel

Electrical Output: 125 kW - each

- \* Equivalency shall be determined by the Executive Secretary.
- \*\* This equipment is listed for informational purposes only.
- \*\*\* 40 CFR 60 Subpart OOO
- \*\*\*\* 40 CFR 60 Subpart IIII, 40 CFR 63 Subpart ZZZZ
- 9. Fabric filter baghouses shall control process streams from the concrete batch plant material storage silos. All exhaust air from the material storage silos shall be routed through it's dedicated fabric filter baghouse before being vented to the atmosphere.
- 10. CEMEX shall notify the Executive Secretary in writing when the installation of the equipment listed in Condition #8 is complete and operational. To insure proper credit when notifying the Executive Secretary, send your correspondence to the Executive Secretary, attn: Compliance Section.

If the construction and/or installation has not been completed within eighteen months from the date of this AO, the Executive Secretary shall be notified in writing on the status of the construction and/or installation. At that time, the Executive Secretary shall require documentation of the continuous construction and/or installation of the operation and may revoke the AO in accordance with R307-401-18.

### **Limitations and Tests Procedures**

- 11. Visible emissions from the following emission points shall not exceed the following values:
  - A. All crushers 15% opacity
  - B. All screens 10% opacity
  - C. All conveyor transfer points 10% opacity
  - D. All diesel engines 20% opacity
  - E. Conveyor drop points 20% opacity
  - F. All other points 20% opacity

Opacity observations of emissions from stationary sources shall be conducted according to 40 CFR 60, Appendix A, Method 9.

For sources that are subject to NSPS, opacity shall be determined by conducting observations in accordance with 40 CFR 60.11(b) and 40 CFR 60, Appendix A, Method 9.

12. Visible fugitive dust emissions from haul-road traffic and mobile equipment in operational areas shall not exceed 20% opacity. Visible emission determinations for traffic sources shall use procedures similar to Method 9. The normal requirement for observations to be made at 15-second intervals over a six-minute period, however, shall not apply. Six points, distributed along the length of the haul road or in the operational area, shall be

chosen by the Executive Secretary or the Executive Secretary's representative. An opacity reading shall be made at each point when a vehicle passes the selected points. Opacity readings shall be made 1/2 vehicle length or greater behind the vehicle and at approximately 1/2 the height of the vehicle or greater. The accumulated six readings shall be averaged for the compliance value.

- 13. The following production and/or consumption limits shall not be exceeded:
  - A. 365,000 tons of construction materials (aggregate and sand) produced per rolling 12-month period
  - B. 75,000 cubic yards of concrete produced per rolling 12-month period
  - C. 3,500 hours of operation on each of the 125 kW generator engines (7,000 hours total for both engines) per rolling 12-month period

To determine compliance with a rolling 12-month total, the owner/operator shall calculate a new 12-month total by the twentieth day of each month using data from the previous 12 months. Records of production and hours of operation shall be kept for all periods when the plant is in operation. Production shall be determined by examination of weight receipts or customer billing records. The records of production shall be kept on a daily basis. Hours of operation shall be determined by supervisor monitoring and maintaining of an operations log.

# **Roads and Fugitive Dust**

- 14. CEMEX shall abide by all applicable requirements of R307-205 for Fugitive Emission and Fugitive Dust sources.
- 15. All unpaved roads and other unpaved operational areas that are used by mobile equipment shall be water sprayed and/or chemically treated to control fugitive dust. The application of water or chemical treatment shall be used. Treatment shall be of sufficient frequency and quantity to maintain the surface material in a damp/moist condition unless it is below freezing. The opacity shall not exceed 20% during all times the areas are in use. If chemical treatment is to be used, the plan must be approved by the Executive Secretary. Records of water and/or chemical treatment shall be kept for all periods when the plant is in operation. The records shall include the following items:
  - A. Date
  - B. Number of treatments made, dilution ratio, and quantity
  - C. Rainfall received, if any, and approximate amount
  - D. Time of day treatments were made
  - E. Records of temperature if the temperature is below freezing.
- 16. The in plant unpaved haul road shall not exceed 0.25 miles (round-trip) in length.

- 17. Control of storage piles, disturbed, or stripped areas shall be required at all times for the duration of the project/operation per R307-205.
- 18. Water sprays or chemical dust suppression sprays shall be installed at the following points to control fugitive emissions:
  - A. All crushers
  - B. All screens
  - C. All conveyor transfer points

The sprays shall operate whenever dry conditions warrant or as determined necessary by the Executive Secretary.

### **Fuels**

- 19. The owner/operator shall use #2 fuel oil as fuel in the generator engines.
- 20. The sulfur content of any fuel oil or diesel burned shall not exceed:

0.5 percent by weight for diesel fuels consumed in all equipment.

The sulfur content shall be determined by ASTM Method D-4294-89 or approved equivalent. Certification of fuel oils shall be either by CEMEX's own testing or test reports from the fuel marketer.

### **Federal Limitations and Requirements**

- 21. In addition to the requirements of this AO, all applicable provisions of 40 CFR 60, New Source Performance Standards (NSPS) Subpart A, 40 CFR 60.1 to 60.18 (General Provisions), Subpart OOO, 40 CFR 60.670 to 60.676 (Standards of Performance for Nonmetallic Mineral Processing Plants), and Subpart IIII, 40 CFR 60.4200 to 60.4219 (Standards of Performance for Stationary Compression Ignition Internal Combustion Engines) apply to this installation.
- 22. In addition to the requirements of this AO, all applicable provisions of 40 CFR 63, National Emission Standards for Hazardous Air Pollutants for Source Categories Subpart A, 40 CFR 63.1 to 63.15 (General Provisions) and Subpart ZZZZ, 40 CFR 63.6580 to 63.6675 (National Emission Standard for Reciprocating Internal Combustion Engines) apply to this installation.

#### **Records & Miscellaneous**

23. At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any equipment approved under this Approval Order, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used

will be based on the information available to the Executive Secretary which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. All maintenance performed on the equipment authorized by this AO shall be recorded.

- 24. The owner/operator shall comply with R307-150 Series. Inventories, Testing and Monitoring.
- 25. The owner/operator shall comply with R307-107. General Requirements: Unavoidable Breakdowns.

The Executive Secretary shall be notified in writing if the company is sold or changes its name.

This AO in no way releases the owner or operator from any liability for compliance with all other applicable federal, state, and local regulations including R307.

A copy of the rules, regulations and/or attachments addressed in this AO may be obtained by contacting the Division of Air Quality. The Utah Administrative Code R307 rules used by DAQ, the Notice of Intent (NOI) guide, and other air quality documents and forms may also be obtained on the Internet at the following web site:

http://www.airquality.utah.gov/

The annual emissions estimations below include point source, fugitive dust, and road dust, and do not include fugitive emissions, tail pipe emissions, or grandfathered emissions. These emissions are for the purpose of determining the applicability of Prevention of Significant Deterioration, non-attainment area, Maintenance area, and Title V source requirements of the R307. They are not to be used for determining compliance.

The Potential To Emit (PTE) emissions for this source the concrete and construction materials plant are currently calculated at the following values:

	<u>Pollutant</u>	Tons/yr
A.	PM <sub>10</sub>	11.08
B.	NO <sub>x</sub>	18.12
C.	$SO_2$	1.20
D.	CO	3.90
E.	VOC	1.44
F.	HAPs	
Various products of incomplete combustion		
	Total HAPs	0.28

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The DAQ is authorized to charge a fee for reimbursement of the actual costs incurred in the issuance of an AO. An invoice will follow upon issuance of the final AO.

Sincerely,

John T. Blanchard, Manager Minor New Source Review Section